

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

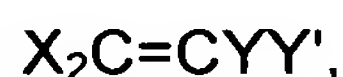
Claims 1 - 12 (Canceled)

Claim 13 (Previously Presented): A method as defined by Claim 23, wherein the different scale inhibitors are introduced into the fluid.

Claim 14 (Previously Presented): A method as defined by Claim 23, wherein the different scale inhibitors are introduced into the oilfield before stimulating, by forcing said different scale inhibitors into the different oilfields, according to a squeeze treatment, the scale inhibitors being released in the outflow streams.

Claim 15 (Currently Amended): A method as defined by Claim 23, wherein the different detectable moieties are selected from the group consisting of:

- a) atom-marked moieties, comprising at least one atom selected from the group consisting of boron, silicon, and germanium,
- b) moieties deriving from acetoxy-styrene, or from ortho-allyl phenol,
- c) moieties deriving from a monomer having the following formula



wherein:

the radicals X, which may be identical or different, are each a hydrogen atom, or a C₁-C₄ alkyl radical,

Y is a hydrogen atom or a C₁-C₄ alkyl radical,

Y' is a radical having the formula –L-Arom, wherein:

L is a covalent bond or a divalent organic linking group optionally comprising heteroatoms, and

Arom is a group comprising at least two conjugated aromatic rings, said rings comprising conjugated carbon atoms, and optionally nitrogen or oxygen atoms, and, linked to said carbon atoms, hydrogen atoms or other substituents,

d) moieties obtained by reacting, after polymerization, units deriving from vinyl-benzyl chloride with

8-aminopyrene-1,3,6-trisulfonic acid or,

9-(2-(ethoxycarbonyl)phenyl)-3,6-bis(ethylamino)-2,7-dimethylxanthylum chloride (~~Rhodamine 6G~~), or

7-amino-4-chloromethylcoumarin,

or salts thereof,

e) moieties deriving from the monomer obtained by reacting vinyl-benzyl chloride with 8-aminopyrene-1,3,6-trisulfonic acid or a salt thereof,

f) moieties comprising at least one phosphate or phosphonate group, and

g) moieties comprising at least one sulfonate or sulfonic acid group.

Claim 16 (Currently Amended): A method as defined by Claim 23, wherein the different scale inhibitors having different detectable moieties are scale-inhibiting polymers comprising scale inhibiting units and different tagging units having the different moieties, wherein the tagging units are selected from the group consisting of:

a) atom-marked units, comprising at least one atom selected from the group consisting of boron, silicon, and germanium,

b) units deriving from acetoxystyrene, or from ortho-allyl phenol,

c) units deriving from a monomer having the following formula:



wherein:

the radicals X, which may be identical or different, are each a hydrogen atom, or a C₁-C₄ alkyl radical,

Y is a hydrogen atom or a C₁-C₄ alkyl radical,

Y' is a radical having the formula -L-Arom, wherein:

L is a covalent bond or a divalent organic linking group optionally comprising heteroatoms, and

Arom is a group comprising at least two conjugated aromatic rings, said rings comprising conjugated carbon atoms, and optionally nitrogen or oxygen atoms, and, linked to said carbon atoms, hydrogen atoms or other substituents,

d) units obtained by reacting, after polymerization, units deriving from vinylbenzyl chloride with

8-aminopyrene-1,3,6-trisulfonic acid

9-(2-(ethoxycarbonyl)phenyl)-3,6-bis(ethylamino)-2,7-dimethylxanthylum chloride (~~Rhodamine 6G~~), or

7-amino-4-chloromethylcoumarin,

or salts thereof, and

e) units deriving from the monomer obtained by reacting vinylbenzyl chloride with 8-aminopyrene-1,3,6-trisulfonic acid or a salt thereof.

Claim 17 (Previously Presented): A method as defined by Claim 16, wherein at least one of the different scale inhibitors is a tagged scale inhibiting polymer comprising tagging units deriving from 9-vinylanthracene.

Claim 18 (Currently Amended): A method as defined by Claim 16, wherein the scale inhibiting units derive from monomers selected from the group consisting of:

vinyl sulfonic acid, or vinyl sulfonate salts,
vinyl phosphonic acid, or vinyl phosphonate salts,
acrylic acid, methacrylic acid,
maleic anhydride, maleic acid,
styrene-p-sulfonic acid, or styrene sulfonate salts,
acrylamido-2-methylpropanesulfonic acids (~~AMPS~~), and
mixtures thereof.

Claim 19 (Canceled)

Claim 20 (Previously Presented): A method as defined by Claim 23, wherein the scale inhibitor is introduced into a water based fluid, or more scale inhibitor is introduced into the fluid, or the scale inhibitor is introduced into the oilfield according to a squeeze treatment.

Claim 21 (Previously Presented): A method as defined by Claim 23, wherein the scale-inhibitors can be distinguished by a single analysis method.

Claim 22 (Previously Presented): A method as defined by Claim 23, wherein the single analysis method is a fluorometer method.

Claim 23 (Previously Presented): A method for stimulating an oilfield, comprising the steps of:

a) injecting at least two inflow fluid streams into at least two production zones of an oil producing well linked to the oilfield, or into at least two oil producing wells, wherein at least two scale inhibitors having detectable moieties are introduced into the at least two zones or wells, respectively, wherein each of the at least two scale inhibitors corresponds to a different zone or well,

wherein at least two outflow streams from the at least two zones or wells are combined before recovering,

wherein the at least two scale inhibitors are different from each other, said at least two scale inhibitors comprising different detectable moieties that can be distinguished by analysis;

b) displacing the oil;

c) recovering an outflow stream of fluid comprising the oil and amounts of the at least two scale inhibitors; and

d) measuring the amounts of the at least two scale inhibitors in the recovered outflow stream of fluid, or of a fluid derived therefrom.

Claim 24 (Previously Presented): The method according to claim 23, further comprising:

e) addressing a scale formation problem that occurs in at least one of the zones or wells, if the amount of the scale inhibitor which corresponds to the at least one zone or well is below a given value.

Claim 25 (Previously Presented w): The method according to claim 24, wherein the step of addressing the scale formation problem comprises: adding the scale inhibitor into the fluid for the zone or well having the scale problem; or adding an additional amount of the scale inhibitor into the fluid; or adding the scale inhibitor into the particular oilfield having a scale problem according to a squeeze treatment.

Claim 26 (Previously Presented): The method according to claim 23, wherein the acetoxy-styrene is 4-acetoxy-styrene.